grey, speckled and broadly tipped with buff; lesser coverts and scapulars pale grey, broadly fringed deep pinkish-buff. One replaced primary and

two replaced secondaries were of normal colour.

Tarsi deep red; claws pale horn with dark grey bases and dark upper central streak on some. The bill was finer than type from the nares to tip, deep vinous-red shading to grey at tip and resembling that of a Turtle Dove Streptopelia turtur in colour and general shape, though not in size. The flesh round the eye was deep red giving the bird the appearance of an orbital ring, again reminiscent of S. turtur.

Measurements: weight 468.6 gms.; wing 238 mm.; tail 149 mm., tarsus 33.5 mm.; bill 27 mm. from base of skull to tip, 21.5 mm. from base of feathers to tip (palumbus averages 22 mm.), width at base 10 mm., width at nares 6.5 mm. Wing formula: 4th primary longest; 3rd 7 mm. shorter; 2nd 12 mm. shorter; 5th and 6th 24 mm. and 42 mm. shorter. On the right side, the 4th rectrice extended for ca. 25 mm. beyond the other and was ca, 10 mm, wider at its widest point than its corresponding member on the left side.

2. Live bird, 5th and 7th March, 1956: watched feeding during afternoon in grass field with other normal birds with which it was compared: rump and head slightly paler blue grey; neck patch white and twice as extensive, probably extending as narrow band round back of neck; rest of upper parts and wing-coverts delicate pinkish-brown; breast, slightly darker than former; no sign of white "flash" in flight or at rest; when flying wing showed a dark and light contrast as in a Stock Dove (Columba oenas). When disturbed it always flew off alone and did not join the circling flock of normal birds, although it joined them when feeding. What was presumed to be the same bird was again seen in the same field on 5th March 1958; on this occasion the wing "flash" was noted as being discernable as a faintly greyish area.

This mutant is of interest for several reasons. Firstly, it is apparently a constant mutant in so far as two apparently similar individuals were involved, and secondly the changes in colour of the plumage are complex. Based on the descriptions given by Harrison (1963) there appears to be some dilution (or chlorochroism) of a non-eumelanic nature of the normal grey plumage, but whether this is true dilution as defined by Rensch (1925) or due to schizochroism, which results in the loss of a pigment, cannot be ascertained. The appearance of pinkish and buff shades may be due to either of the above causes or to a degree of erythrism. A surprising feature is the increase in the extent of the white neck patches and the loss of the white wing flashes. A final explanation of this interesting aberration will depend on a better understanding of the pigment structure of the Wood Pigeon and the genetical factors governing it.

Harrison, C. J. O. (1963): Grey and fawn variant plumages. *Bird Study*, 10: 219–233. Rensch, B. (1925): Die forberaberration der Vogel. *Journ. f. Orn.*, 73: 514–539.

Comments on the mutant Wood Pigeon Columba palumbus

by R. K. Murton

I now have in my possession the aberrant Wood Pigeon shot near Christchurch, Hants, on 22nd December 1964 which was described above by Dr. J. S. Ash. I should like to comment on its partial resemblance to certain of the Canary Islands "Wood Pigeons", a resemblance which impressed me as soon as I received the skin. The specimen is interesting firstly because the plumage changes are complex and apparently constant as Ash points out and for this reason it may give some insight into the evolution of the island species.

It should be pointed out that those *Columba* pigeons inhabitating the Canary Islands are descendants from successive influxes of mainland *Columba* stock or *palumbus* species which became sufficiently speciated not to interbreed with later arrivals from the mainland. In order of evolutionary emergence there exist *Columba junoniae* Hartert 1916, *C, trocaz* Heinekin 1829, *C. trocaz bollii* Godman 1872 (*C. bollii*, as some consider this a good species) and *C. palumbus maderensis* the latest arrival, which differs little from the type. Full descriptions of these island species can be found in the original accounts but for some general comparisons see Goodwin (1959a).

It is sufficient to point out that *C. junoniae* has lost the white neck and wing marks, the back and wings have darkened to a deep immaculate chocolate, while the *palumbus* type neck iridescence has been extended to form a complete neck band. *C. trocaz* is much darker than *palumbus* and has deeper coloured vinous under parts, the colour being more extensive than in *palumbus*. The white wing marks have been lost while the neck mark has become more extensive to form a complete area of white over the top of the neck. The iridescent neck colours seem to have suffused into the white resulting in grey-green undertones. *C. bollii* resembles *trocaz* but is smaller, has a finer bill and has also lost the white neck mark, while the iridescent neck plumage has become more extensive.

It is interesting that the mutant has suddenly lost the white wing marks, in which it resembles all the Canary Islands species; acquired a larger but duller neck mark, in which it resembles *trocaz*; and become redder and greyer than normal—which in general is a feature of the island forms. I was also struck by the bill, which appeared finer at the tip than is normal in *palumbus*. The appearance of this aberrant individual suggests that a similar mutant could have arisen in early influx(es) of birds reaching the Canary Islands and be selected for under the protection of geographical isolation. This is of course speculative, but the important point is that this mutant is to a large extent intermediate between the mainland and island pigeons and it suggests that the evolutionary processes involved could have progressed rather suddenly by a mutation bringing about seemingly drastic changes. It is also important to note that the loss of signal marks in this case clearly indicates a secondary character and not a primitive one as far as the island species are concerned.

Finally, in discussing some aberrantly coloured wild pigeons in the National Collection, Goodwin (1959b) mentions eight variants, three of which are redder than normal and another two which are very much redder with a change in colour pattern.

References:

Goodwin, D. 1959a Taxonomy of the genus Columba Bull. Brit. Mus. (Nat. Hist.) Zool. 6: 1-23.

— 1959b Some colour varieties of wild pigeons Bull, B.O.C. 79; 3-9